wherein the plug obstructs flow of the molten solder into the via.

28. (New) The method of claim 27, further comprising:

placing a first component on the printed circuit board; and

wave soldering the bottom surface, wherein the first component is mechanically and electrically affixed to the printed circuit board, and wherein the wave soldering provides said molten solder.

## **REMARKS**

Currently pending claims 1, 3-6, 8-10, 12-13, 15-16, and 21-28 are for consideration by the Examiner. Claims 2, 7, 11, and 14 are cancelled herein. Claims 21-28 are new. Claims 1, 5, and 6 are amended herein.

Applicants respectfully believe that the amended claims and new claims are within the scope of the species elected herein.

Prompt and favorable examination on the merits is respectfully requested.

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## Appendix A. Identification of Amended Material

Please amend claims 1, 5, and 6 as follows:

- 1. (Amended) A method for constructing a printed circuit board assembly, comprising the steps of:
  - (a) providing a printed circuit board comprising:
  - a top surface comprising a top pad, wherein the top pad is electrically connectable to a top component;
    - a bottom surface; and
  - a via extending through the circuit board from the top surface to the bottom surface, wherein the via is electrically connected to the top pad, and wherein the via includes an opening at the bottom surface; [and]
- (b) forming a plug in the via by inserting a volume of material into the via through the opening in the via; and
- (c) contacting an end of the plug with molten solder, wherein the end of the plug is at the bottom surface, and wherein the plug obstructs flow of the molten solder into the via.
- 5. (Amended) The method of claim 1, further comprising the steps of:

installing the top component on the top surface, wherein a contact element of the top component is mechanically and electrically affixed to the top pad;

placing a second component on the printed circuit board; and

wave soldering the bottom surface, wherein the second component is mechanically and electrically affixed to the printed circuit board, and wherein the wave soldering provides said

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## molten solder.

6. (Amended) The method of claim 1, wherein step (b) is preceded by the step of:

installing the top component on the top surface, wherein a contact element of the top component is mechanically and electrically affixed to the top pad; and wherein step (b) is followed by the steps of:

placing a second component on the printed circuit board; and

wave soldering the bottom surface, wherein the second component is mechanically and electrically affixed to the printed circuit board, and wherein the wave soldering provides said molten solder.